A Phase III Randomized, Double-Blind, Controlled Study of the Use of Anti-HIV Immune Serum Globulin (HIVIG) for the Prevention of Maternal-Fetal HIV Transmission in Pregnant Women and Newborns Receiving Zidovudine (AZT)

This study is no longer recruiting patients.

Sponsored by

National Institute of Child Health and Human Development (NICHD)
National Institute of Allergy and Infectious Diseases (NIAID)

Purpose

To evaluate the effect of anti-HIV immune serum globulin (HIVIG) versus immune globulin (IVIG) administered during pregnancy and to the newborn, in combination with zidovudine (AZT) administered intrapartum and to the newborn, on incidence of HIV infection in infants born to HIV-infected women who received AZT during pregnancy for medical indications. Vertical transmission of HIV from mother to child may occur before, during, or after parturition (via breast-feeding). It is believed that therapy administered both during pregnancy and intrapartum may help prevent vertical transmission. Additionally, adjunctive short-term antiretroviral therapy for the newborn, following the intensive viral exposure presumed to occur at birth, may be necessary.

Condition	Treatment or Intervention	Phase
HIV Infections Pregnancy	Drug: Anti-HIV Immune Serum Globulin (Human) Drug: Globulin, Immune Drug: Zidovudine	Phase III

MEDLINEplus related topics: AIDS

Study Type: Interventional
Study Design: Treatment, Parallel Assignment, Safety Study

Further Study Details:

Vertical transmission of HIV from mother to child may occur before, during, or after parturition (via breast-feeding). It is believed that therapy administered both during pregnancy and intrapartum may help prevent vertical transmission. Additionally, adjunctive short-term antiretroviral therapy for the newborn, following the intensive viral exposure presumed to occur at birth, may be necessary.

Pregnant women who are currently receiving AZT are randomized at 20-30 weeks of gestation to begin receiving either HIVIG or IVIG every 28 days up to delivery. Within 12 hours after birth, the infant receives an infusion of matching study drug. During labor, all women receive an intravenous loading dose of AZT administered over 1 hour, followed by continuous infusion during the

intrapartum period until the umbilical cord is clamped. All infants receive AZT syrup every 6 hours, beginning as soon as oral fluids are tolerated but within 8-12 hours after birth and continuing for 6 weeks. Women are followed until 26 weeks postpartum. Infants are followed at weeks 1, 2, 4, and then every 4 weeks through week 24, every 12 weeks through week 60, at week 78 (18 months), and at week 104 (24 months).

Eligibility

Ages Eligible for Study: 13 Years - 60 Years, Genders Eligible for Study: Female

Criteria

Inclusion Criteria

Concurrent Medication: Allowed:

- Women - Medications as required for obstetrical management of HIV infection (e.g., acyclovir, ketoconazole, isoniazid, antibiotics, or other antiretroviral therapy if intolerant or failing on AZT), unless specifically excluded.
- Infants - Drug treatment for signs of drug withdrawal (phenobarbital, chlorpromazine, tincture of opium, paregoric or Valium).
- Infants - Medications as indicated for management of an HIV-exposed infant (e.g., hepatitis B vaccine, syphilis treatment, Pneumocystis carinii pneumonia prophylaxis). Patients must have:
- Documented HIV infection.
- Been receiving AZT during current pregnancy for medical indications.
- Gestational age between 20 and 30 weeks.
- Intention to carry pregnancy to term.
- Available venous access (placement of central line or Hickman catheter not indicated for study purposes).
- Willingness to be followed by a participating site for study duration. NOTE:
- Father of fetus (if available after a reasonable attempt to contact him) must also provide informed consent.

Exclusion Criteria

Co-existing Condition: Patients with the following symptoms or conditions are excluded:

- Illness associated with excessive protein loss, e.g., severe proteinuria (protein >= 4 g protein in a 24-hour urine collection). Patients with the following prior conditions are excluded:
- Evidence of pre-existing fetal anomalies (e.g., anencephaly, renal agenesis, or Potter's syndrome) that may result in a high probability that the fetus-infant would not survive to the end of the study period.
- Chorionic villus sampling (CVS) or percutaneous umbilical blood sampling (PUBS) occurring in this pregnancy prior to study entry.
- Illness associated with excessive protein loss, e.g., chronic diarrhea with no documented weight gain in a 3-month period during pregnancy.
- Pre-existing conditions such as hypogammaglobulinemia or immune thrombocytopenia that are felt to require IVIG therapy. Prior Medication: Excluded:

- Receipt of anti-HIV vaccines or passive immunotherapy with HIVIG or IVIG during this pregnancy prior to study entry.
- Receipt of antiretroviral agents other than AZT during this pregnancy prior to study entry (e.g., rCD4, CD4-IgG, d4T, ddC, ddI).

Expected Total Enrollment: 1600

Location and Contact Information

California

UCSF / Moffitt Hosp - Pediatric, San Francisco, California, 941430105, United States
UCSD Med Ctr / Pediatrics / Clinical Sciences, La Jolla, California, 920930672, United States
San Francisco Gen Hosp, San Francisco, California, 94110, United States
Harbor - UCLA Med Ctr / UCLA School of Medicine, Los Angeles, California, 905022004, United States
UCLA Med Ctr / Pediatric, Los Angeles, California, 900951752, United States
Los Angeles County - USC Med Ctr, Los Angeles, California, 90033, United States

Colorado

Children's Hosp of Denver, Denver, Colorado, 802181088, United States
Denver Gen Hosp, Denver, Colorado, 802044507, United States

Connecticut

Univ of Connecticut / Farmington, Farmington, Connecticut, 06032, United States

District of Columbia

Washington Hosp Ctr, Washington, District of Columbia, 200102931, United States
Howard Univ Hosp, Washington, District of Columbia, 20060, United States
Children's Hosp of Washington DC, Washington, District of Columbia, 200102916, United States

Florida

Univ of Miami (Pediatric), Miami, Florida, 33161, United States
Univ of Florida Health Science Ctr / Pediatrics, Jacksonville, Florida, 32209, United States

Illinois

Univ of Illinois College of Medicine / Pediatrics, Chicago, Illinois, 60612, United States

Louisiana

Tulane Univ / Charity Hosp of New Orleans, New Orleans, Louisiana, 701122699, United States
Univ Hosp, New Orleans, Louisiana, 70112, United States

Maryland

Univ of Maryland at Baltimore / Univ Med Ctr, Baltimore, Maryland, 21201, United States
Johns Hopkins Hosp - Pediatric, Baltimore, Maryland, 212874933, United States

Massachusetts

Children's Hosp of Boston, Boston, Massachusetts, 021155724, United States
Boston City Hosp / Pediatrics, Boston, Massachusetts, 02118, United States
Brigham and Women's Hosp, Boston, Massachusetts, 02115, United States
Baystate Med Ctr of Springfield, Springfield, Massachusetts, 01199, United States
Univ of Massachusetts Med School, Worcester, Massachusetts, 016550001, United States

Michigan

Children's Hosp of Michigan, Detroit, Michigan, 48201, United States

New Jersey

Univ of Medicine & Dentistry of New Jersey / Univ Hosp, Newark, New Jersey, 071032714, United States

New York

Bellevue Hosp / New York Univ Med Ctr, New York, New York, 10016, United States
Columbia Presbyterian Med Ctr, New York, New York, 10032, United States
Mount Sinai Med Ctr / Pediatrics, New York, New York, 10029, United States
Children's Hosp at Albany Med Ctr, Albany, New York, 12208, United States
SUNY Health Sciences Ctr at Syracuse / Pediatrics, Syracuse, New York, 13210, United States
Bronx Lebanon Hosp Ctr, Bronx, New York, 10457, United States
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North Carolina

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Ohio

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Pennsylvania

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Hosp of the Univ of Pennsylvania, Philadelphia, Pennsylvania, 19104, United States
Thomas Jefferson Univ Hosp, Philadelphia, Pennsylvania, 191075098, United States
Saint Christopher's Hosp for Children, Philadelphia, Pennsylvania, 191341095, United States

South Carolina

Med Univ of South Carolina, Charleston, South Carolina, 294253312, United States

Tennessee

Methodist Hosp Central, Memphis, Tennessee, 381052794, United States
Saint Jude Children's Research Hosp of Memphis, Memphis, Tennessee, 381052794, United States
Regional Med Ctr at Memphis, Memphis, Tennessee, 38103, United States

Texas

Children's Med Ctr of Dallas, Dallas, Texas, 75235, United States
Hermann Hosp / Univ Texas Health Science Ctr, Houston, Texas, 77030, United States
Texas Children's Hosp / Baylor Univ, Houston, Texas, 77030, United States

Washington

Children's Hospital & Medical Center / Seattle ACTU, Seattle, Washington, 981050371, United States

Puerto Rico

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Study chairs or principal investigators

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More Information

Click here for more information about Zidovudine

Click here for more information about Globulin, Immune

Click here for more information about Anti-HIV Immune Serum Globulin (Human)

Publications

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McKinney RE Jr. Ongoing and future trials of antiretroviral therapy in the pediatric AIDS clinical trials group (PACTG). Conf Retroviruses Opportunistic Infect. 1996 Jan 28-Feb 1;3rd:173

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Lambert JS, Mofenson LM, Fletcher CV, Moye J Jr, Stiehm ER, Meyer WA 3rd, Nemo GJ, Mathieson BJ, Hirsch G, Sapan CV, Cummins LM, Jimenez E, O'Neill E, Kovacs A, Stek A. Safety and pharmacokinetics of hyperimmune anti-human immunodeficiency virus (HIV) immunoglobulin administered to HIV-infected pregnant women and their newborns. Pediatric AIDS Clinical Trials Group Protocol 185 Pharmacokinetic Study Group. J Infect Dis. 1997 Feb;175(2):283-91.

Lambert JS, Moye J, Sapan C, Mofenson L, Fletcher C, Whitehouse J, Fowler MG, Nemo G, Stiehm ER. Demonstration of feasibility and preliminary safety and pharmaco-kinetics in a phase III study of hyperimmune HIV intravenous immunoglobulin (HIV-IG) to prevent maternal-fetal HIV transmission. Int Conf AIDS. 1996 Jul 7-12;11(2):84 (abstract no WeB3163)

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transmission of human immunodeficiency virus type 1 in women treated with zidovudine. Pediatric AIDS Clinical Trials Group Study 185 Team. N Engl J Med. 1999 Aug 5;341 (6):385-93.

Frenkel LM. Therapeutic issues pertaining to HIV-1 infected pregnant women in developed countries. 39th Intersci Conf Antimicrob Agents Chemother. 1999 Sept 26-29

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